



3661

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

In re Application of:
Michael Lester Kerns
For: METHOD OF PROVIDING
NARRATIVE INFORMATION TO A
TRAVELER
Serial No.: 10/610,489
Filed: June 30, 2003

) Docket No. MLK-1-A
) Art Unit: 3661
) Examiner:

I hereby certify that this correspondence is being
deposited with the United States Postal Service as
first class mail in an envelope addressed to:
Commissioner for Patents, P. O. Box 1450,
Alexandria, VA 22313-1450, on October 29, 2003.

Mary A. Nicoloff

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE IN COMPLIANCE WITH 37 C.F.R. §1.98

As a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the
Applicants are calling the following documents to the attention of the Patent Office and
request that they be considered by the Examiner:

United States Patent 5,225,842
United States Patent 5,323,164
United States Patent 5,862,511
United States Patent 6,169,514
United States Patent 6,188,956
United States Patent 6,360,167
United States Patent 6,362,751
United States Patent 6,374,180
United States Patent 6,381,540
United States Patent 6,545,637

However, the above-listed references may not be prior art under 35 U.S.C. §102 and
this document should not be construed as an admission that any of the above-listed references
are prior art within the meaning of 35 U.S.C. §102.

United States Patent 5,225,842 may be relevant to the prosecution of the subject

patent application because it discloses a tracking system employing global positioning system (GPS) satellites that provide extremely accurate position, velocity, and time information for vehicles or any other animate or inanimate object within any mobile radio communication system or information system, including those operating in high rise urban areas. The tracking system includes a sensor mounted on each object, a communication link, a workstation, and a GPS reference receiver. The sensor operates autonomously following initialization by an external network management facility to sequence through the visible GPS satellites, making pseudo range and delta range or time difference and frequency difference measurements.

United States Patent 5,323,164 may be relevant to the prosecution of the subject patent application because it discloses a satellite radio wave capturing method of a GPS receiver, in which an offset value of an oscillator of the GPS receiver is calculated by subtracting a Doppler frequency deviation of the first captured satellite radio wave from an actual received frequency of the first captured satellite radio wave, and with respect to the second and subsequent satellite radio waves to be captured, the search center frequencies are reset by using the calculated offset value, and an oscillating frequency of the oscillator is changed by using the set search center frequency as a reference, thereby capturing the radio wave of the target satellite. The elapsed time which is required from the power-OFF at the preceding position measurement by the GPS receiver to the power-ON at the present position measurement is measured. In accordance with the duration of the measured elapsed time, a determination is made to see whether or not the offset value of the oscillator which has been obtained at the preceding position measurement and stored in a memory in the GPS receiver is used as an offset value of the oscillator at the present position measurement. The mean value of a plurality of offset values obtained within a predetermined time just after the power-ON of the GPS receiver is calculated and stored. At the next power-ON of the receiver, the stored mean value of the offset values is used as an initial offset value at the start of the position measurement.

United States Patent 5,225,842 may be relevant to the prosecution of the subject patent application because it discloses a vehicle navigation system and method that uses information from a Global Positioning System (GPS) to obtain velocity vectors, which include speed and heading components, for "dead reckoning" the vehicle position from a previous position. If information from the GPS is not available, then the vehicle navigation system uses information from an orthogonal axes accelerometer, such as two or three orthogonally positioned accelerometers, to propagate vehicle position. Because the GPS

information should almost always be available, this vehicle navigation system relies less on its accelerometers, thereby allowing the use of less expensive accelerometers. The vehicle navigation system retains the accuracy of the accelerometers by repeatedly calibrating them with the velocity data obtained from the GPS information. This vehicle navigation system calibrates the sensors whenever GPS data is available (for example, once a second at relatively high speeds).

United States Patent 5,169,514 may be relevant to the prosecution of the subject patent application because it discloses a Low Earth Orbiting satellite system that provides location and data communications services to mobile users equipped with a receiver/transmitter. The receiver/transmitter acts as a transponder that responds to a query transmitted over the satellite network. The response is sent after a precisely controlled time interval after the transponder receives the query so that the ground station can estimate the length of the propagation path from the satellite to the transponder. The transponder also transmits the response at a frequency that is proportional to the frequency of the received query so that the ground station can estimate the first and second derivatives of the length of the propagation path according to the measured Doppler shift. The ground station also estimates the satellite positioning using telemetry from the satellite obtained from the on-board GPS receiver. The position of the user terminal relative to the satellite position is then determined from the path length measurements.

United States Patent 6,188,956 may be relevant to the prosecution of the subject patent application because it discloses an electronic navigation device, and method, for selectively displaying the names of thoroughfares on the display of a navigation device. The device includes a housing for housing a processor, and a keypad input unit, a memory, a display having a display screen, and an antenna, all of which are connected to the processor. The navigation device is operable to acquire satellite signals from global positioning satellites and compute a geographic location of the device in a conventional manner. The navigation device and method of United States Patent 6,188,956 is preferably incorporated in a unit to be mounted in a land vehicle, such as an automobile or truck. Cartographic data, including names of various geographical locations and, particularly, the names of thoroughfares, is stored in memory. In operation the electronic navigation device of United States Patent 6,188,956 is mounted in a land vehicle. As the vehicle is navigated along a thoroughfare, the navigation device calculates its position, direction of travel, and velocity. Electronic map data corresponding to the geographic area surrounding the vehicle is displayed on the display of the navigation device. Utilizing the electronic map data and the current position of the

navigation device, the processor determines which thoroughfare is being navigated in a conventional manner.

United States Patent 6,360,167 may be relevant to the prosecution of the subject patent application because it reveals a vehicle navigation system with location-based multimedia annotations (text, graphics and/or audio). In the system of United States Patent 6,360,167, "ads" comprising location-based multimedia annotations are periodically presented. These ads are presented based upon the current location of the vehicle relative to a location with which the ad is associated. In some cases the ads are displayed at power-up independent of vehicle location. The user also has the ability to request additional information associated with the ad. The additional information may be stored on the database of the navigation system, read by a removable media reader connected to the navigation system or received via a wireless communication system on the vehicle. This additional information may include text, graphics, audio and/or multimedia presentations that relate to the ad selected by the user.

United States Patent 6,362,751 may be relevant to the prosecution of the subject patent application because it discloses a route exclusion list system that permits the user to designate certain roads or areas that a navigation system should avoid when planning a route between a beginning point and a destination point. The route exclusion list system generally includes a database of road segments and a cost associated with the road segments, such as estimated time of travel across that road segment or estimated length of travel across that road segment. A display displays a map having a plurality of the road segments. A user input device permits a user to encircle and select displayed road segments. The cost associated with each selected road segment is increased thereby making it unlikely that the navigation system will use any of the selected road segments when determining a route between the beginning point and the destination point. The system can be operated independently of the navigation system and the increase in cost for each road segment can be associated with a specific period of time.

United States Patent 6,381,540 may be relevant to the prosecution of the subject patent application because it discloses the use of magnetic and tilt sensors to allow for a compass setting to be displayed at any time with the unit in a wide variety of orientations, even when the user is standing still and moving at a slow speed. The addition of these sensors also allows for a moving map display to be realized when the user is standing still.

United States Patent 6,374,180 may be relevant to the prosecution of the subject patent application because it discloses a navigation system that enables a user to search for

points of interest across categories is provided. The user may enter a character string of a desired destination into the navigation system using a user input device. The navigation system will search for points of interest in the database for the character string. The character string may be from the first portion of the name of the point of interest or somewhere in the middle of the name of the point of interest. In this manner, the user will be able to locate a point of interest from the database while having a partially incorrect name. Additionally, the navigation system may relate the points of interest to the vehicle location, such as by vehicle direction or proximity of the points of interest to the vehicle.

United States Patent 6,545,637 may be relevant to the prosecution of the subject patent application because it discloses an improved navigational route planning device which provides more understandable, accurate and timely route calculation capabilities. The navigational aid device with route calculation capabilities includes a processor connected to a memory. The memory includes cartographic data and a desired destination, the cartographic data including data indicative of thoroughfares of a plurality of types. A display is connected to the processor and is capable of displaying the cartographic data. The device is adapted to calculate a route to navigate to the desired destination. And, the device is adapted to adjust a starting point for the route calculation to an appropriate location such that the device is on the route at a time when the route calculation is completed. The device processes travel along the route, recognizes when the device has deviated from the route, and calculates a new route to navigate to the desired destination.

Copies of the above patents and Form PTO-1449 are enclosed herewith.

Respectfully submitted,



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FORM PTO-101 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY DOCKET NO. MLK-1-A	SERIAL NO. 10/610,489
	APPLICANT (S) Michael Lester Kerns	
	FILING DATE JUNE 30, 2003	GROUP 3661

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Sub-class	Filing Date if Appropriate	
	5,225,842	Jul. 6, 1993	Brown et al.	342	357	5/9/91	
	5,323,164	Jun. 21, 1994	Endo	342	357	6/21/94	
	5,862,511	Jan. 19 1999	Croyle et al	701	213	12/28/95	
	6,169,514	Jan. 2, 2001	Sullivan	342	357.05	1/31/00	
	6,188,956	Feb. 13, 2001	Walters	701	200	12/30/98	
	6,360,167	Mar. 19, 2002	Millington et al.	701	211	1/29/99	
	6,362,751	Mar. 26, 2002	Upparapalli	340	995	6/11/98	
	6,374,180	Apr. 16, 2002	Slominski et al.	701	208	9/18/00	
	6,381,540	Apr. 30, 2002	Beason et al.	701	213	9/14/01	
	6,545,637	Apr. 8, 2003	Krull et al.	342	357.09	12/20/01	

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Sub-Class	Translation YES NO	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initial		
EXAMINER	DATE CONSIDERED:	

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.